

The Zinc/Cadmium Symposium:

Facing Environmental Challenges in the Northwest

September 9-12, 2002

Coeur d'Alene, Idaho

www.inel.gov/western-connections

KEY055
University of Idaho
Idaho Water Resources Research Institute
205 Morrill Hall
Moscow, ID 83844-3011

Logistical Information

The Coeur d'Alene Resort, located on Lake Coeur d'Alene, is the official site for the Symposium. To reserve a room at the special Symposium rate of \$56.00 per night, call the hotel (800-688-5253) no later than August 15, 2002. Ground transportation is available from the Spokane, Washington airport to the hotel for \$45.00 roundtrip and reservations should be made with the Resort.

To register for the Symposium, please complete the Registration Form below and return with registration fee to the address on the form. Attendance is limited to 150. The final day for registration is **August 15, 2002**. Agenda updates will be posted on the Zinc/Cadmium Symposium website at www.inel.gov/western-connections.

Registration Form

Zinc/Cadmium Symposium
Facing Environmental Challenges in the Northwest
September 9-12, 2002
Coeur d'Alene Resort ♦ Coeur d'Alene, Idaho

(Please print legibly and spell out all acronyms.)

Please check one the following:

- ☐ Registration for 2-day conference by August 15, 2002 - \$175.00
☐ Registration for 2-day conference after August 15, 2002 - \$200.00
Conference registration includes breaks, lunch & reception

- Please check one of the following:
☐ Registration for site visits by August 15, 2002 - \$35.00
☐ Registration for site visits after August 15, 2002 - \$50.00
Site Visit registration includes a break & lunch

☐ Enclosed is a check, money order, or purchase order for \$_____.

For credit card payments, please circle:
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Idaho Water Resources Research Institute, 205 Morrill Hall
P.O. Box 443011
University of Idaho
Moscow, Idaho 83844-3011

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The Zinc/Cadmium Symposium

The Symposium will address science and research needs to develop cost-effective technologies that may be applied to remediation of zinc and cadmium found in the waters of the Coeur d'Alene basin and other areas facing similar mine waste contamination related issues. Information on all phases of technology development, theoretical analysis, laboratory experiments, pilot tests, and field applications are relevant to Symposium discussions.

About Zinc and Cadmium

Zinc and cadmium leach from mine waste materials into surface waters. The Coeur d'Alene basin in North Idaho has concentrations of zinc and cadmium well above ambient water quality standards. Due to the large volume of source material, much of which is inaccessible, the significant surface and groundwater flow in this region, and the connection between groundwater and surface water, a problem has been created that challenges conventional remedial approaches.

Complete removal of source material is neither possible nor cost-effective and active water treatment requires costly operations in perpetuity. Other technologies for mine waste remediation have proven only marginally effective in most situations. This problem calls for new innovative technologies or creative application of existing technologies to remove zinc and cadmium from water and for technologies to prevent the current leaching of these metals from mine waste. Similar heavy metal problems due to historic mining activities are present in most of the western states and Alaska.

“Good science is critical to the future of western environmental policy. That is why I look toward gatherings such as this as the proving grounds for the latest technical knowledge that will move sound policy decisions.”



- Senator Michael Crapo

Preliminary Agenda*

MONDAY, SEPTEMBER 9, 2002

4:00 PM ♦ **Registration**

6:00 PM ♦ **Reception**

TUESDAY, SEPTEMBER 10, 2002

8:00 AM ♦ **Welcome & Introductions**
Purpose of Symposium

♦ **Environmental History of the Coeur d'Alene Basin**
Panel Discussion

9:00 AM ♦ **Major Technical Challenges**
- Water Treatment
- Tributary Streams
- Impacted Sediments
- Scientific Challenges Relating to Geochemistry and Hydrology

12:00 PM ♦ **Lunch**
Senator Michael Crapo **invited speaker*

1:30 PM ♦ **Presentations on the State-of-the-Art Remediation Technologies**
- Active Water Treatment
- Passive Barriers
- Biological Treatment
- Source Passivation
- Measurement Systems

4:30 PM ♦ **Discussion of Focus Group Goals**

5:00 PM ♦ **Recess**

***Agenda subject to change.**
Visit www.inel.gov/western-connections for updates.

WEDNESDAY, SEPTEMBER 11, 2002

8:00 AM ♦ **Building a Consensus Research Agenda: The Challenge Ahead**
Dr. Kathie Olsen, Chief Scientist, NASA
**invited speaker*

9:00 AM ♦ **Focus Groups Meet**
- Active Treatment
- Passive Barriers
- Passive Treatment
- Source Passivation
- Measurement Systems

11:15 AM ♦ **Summary Presentations and Discussion**

12:30 PM ♦ **Focus Groups Reconvene - Working Lunch**

2:00 PM ♦ **Perspectives on Moving Forward and Final Observations**
Focus Group Chairs

3:00 PM ♦ **Adjourn**

THURSDAY, SEPTEMBER 12, 2002

Coeur d'Alene Regional Site Visits

♦ **Mine Tailings and Restoration Activities in the Wallace Area**
Tour restoration activities in the Canyon Creek drainage near Wallace. The tour will visit removal and restoration sites, as well as contaminated areas scheduled for future restoration.

♦ **Restoration Activities on the Bunker Hill Smelter Complex in the Kellogg/Smelterville Area**
Tour restoration activities of the Bunker Hill Smelter along with the water treatment, repository and impoundment facilities that were part of Superfund activities in the region.



Western Connections

This Symposium is being held under the auspices of Western Connections, a new program created by the U.S. Department of Energy's Idaho National Engineering and Environmental Laboratory (INEEL) to assist Idaho and other western states in resolving their most complex energy and environmental problems. Through Western Connections, the INEEL and its university partners will collaborate in scientific research and technology development to meet these regional challenges.

Symposium Organizers

- ♦ Coeur d'Alene Tribe
- ♦ Idaho Department of Environmental Quality
- ♦ Idaho National Engineering and Environmental Laboratory
- ♦ Idaho Water Resources Research Institute
- ♦ Inland Northwest Research Alliance
- ♦ Office of Senator Michael Crapo
- ♦ U.S. Environmental Protection Agency

The Organizing Committee hopes you will participate in the Symposium's technical discussions and enjoy all that the Coeur d'Alene region has to offer.